

retrieved from the system memory through the information router. Applicant is unable to find any mention of “system memory” in the Urakawa reference and no cited paragraph is provided in the rejection. Accordingly, Applicant respectfully submits that it appears that a prima facie showing of anticipation has not been made. Accordingly, the claims are in condition for allowance.

In addition, Urakawa is directed to a dicing line that is interposed between four basic chips that configure a memory chip. The logic circuit shown in Urakawa is not disclosed as having any kind of router capability. In fact, Applicant respectfully requests a showing as to which paragraph or paragraphs within the Urakawa reference describe an information router as claimed as Applicant is unable to find any such disclosure. The “Response to Arguments” section merely says “For example, FIG. 19 of Urakawa shows the logic chip receiving data from a DRAM and distributing these data to the memory chips.” However, Applicant respectfully submits that FIG. 19 merely shows a logic chip connected to two memory chips and does not show any routing by the logic chip of information from any other chip to or from the memory chip. To the contrary, it just appears that the logic chip accesses the memory chips as needed. An information router routes on behalf of another chip, for example, and no such structure is shown or taught in the cited reference. If the rejection is maintained, Applicant respectfully requests a showing by paragraph number of where the Urakawa reference discloses an information router integrated and coupled as claimed.

As to claim 6, Applicant respectfully submits that the claim requires that the system memory is disposed on a top surface of the carrier substrate and an application specific integrated circuit that is coupled on a bottom surface of the carrier substrate using a flip chip technology. However, the memory shown in FIG. 21 of Urakawa shows an opposite

construction wherein the memory (and not system memory) actually appears to be disposed on the bottom surface of the carrier substrate, and therefore does not anticipate this claim.

As to claim 21, Applicant respectfully reasserts the relevant remarks made above with respect to claim 1. Accordingly, this claim is also in condition for allowance.

The dependent claims add additional novel and non-obvious subject matter.

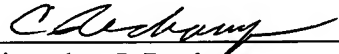
Claims 3, 4, 10-16 and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Urakawa in further view of Melo et al. Applicant respectfully reasserts the relevant remarks made above with respect to Urakawa. Accordingly, these claims are also in condition for allowance.

Also, Melo is directed to a device and method for dynamically reducing power consumption with input buffers of a bus interface unit. The office action alleges that FIG. 1 of Melo “discloses an analogous package” as claimed. However, Applicant respectfully wishes to point out that item 10 shown in FIG. 1 of Melo is not an integrated circuit package as alleged in the office action, but to the contrary as stated in Melo, “FIG. 1 illustrates a computer 10 having multiple buses...”. As such, Melo is not directed to an integrated circuit having carrier substrates as claimed. In fact, Melo appears to describe all external packages which Applicant’s invention attempts to overcome. Accordingly, the reasoning given based on Melo is not supported by the Melo reference and as such, the claims are in condition for allowance. In fact, Melo shows that the system memory 18 and Northbridge 14 are not on a common carrier substrate. Therefore, the system memory and Northbridge configuration of Melo would not result in the claimed subject matter as Melo does not teach the claimed integrated structure or operations in any substrate as best understood by reading Melo.

Applicant respectfully submits that the claims are in condition for allowance and that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below-listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

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